

REMARKS/ARGUMENTS

Interview request

Applicants respectfully request a telephonic interview after the Examiner has reviewed the instant response and amendment. Applicants request the Examiner call Applicants' representative, as noted below.

Status of the Claims

Pending claims

Claims 1, 46, 56-58, 61, 64, 66, 68, 70, 73, 125, 126, 130, 131, 133, 135, 137, 138, 140, 157, 161, 169, 171, 218, 221, 225, 229, 231-134, 236, 241, and 271-274, are currently pending.

Claims canceled and claims newly added

Claims 64, 66, 68, 70, 157, and 161, are canceled in the instant amendment without prejudice or disclaimer. New claim 275 is added. Accordingly, after entry of the instant amendment claims 1, 46, 56-58, 61, 73, 125, 126, 130, 131, 133, 135, 137, 138, 140, 169, 171, 218, 221, 225, 229, 231-134, 236, 241, and 271-275, will be pending.

Claims Withdrawn

Claims 73, 125, 126, 130, 131, 135, 137, 138, 140, 169, 171, 218, 221, 225, 229, 231-234, 236, 241, and 271-274, remain withdrawn as they are allegedly drawn to non-elected inventions.

Claims under examination

Claims 1, 46, 56-58, 61, and 133, are currently under examination.

Outstanding Objections and Rejections to the Claims

Claim 133 is objected to for informalities. Claims 1, 46, 56-58, 61, and 133 are rejected under 35 U.S.C. § 112, first paragraph enablement and written description requirements. Claims 1, 46, 56-58, and 61 are rejected in part under 35 U.S.C. § 102(b). Claims 1, 46, 56-58, 61, and 133 are rejected in part under 35 U.S.C. § 103(a).

Applicants, respectfully traverse all outstanding objections and rejections to the claims.

Support for the claim amendments

The specification sets forth an extensive description of the invention in the amended claims. For example, nucleic acids at least 95% identical to SEQ ID NO.: 7, encoding polypeptides; or nucleic acids encoding polypeptides at least 95% identical to SEQ ID No.: 8; or nucleic acids encoding polypeptide fragments of SEQ ID NO.: 8; all having glucoamylase activity, can be found thought the specification as filed. Accordingly, Applicants aver that no new matter has been added in the instant amendment.

Elections/Restriction

The Office alleges that Groups I-XXII, lack unity of invention as stated on pages 2-4, of the OA. In brief, the Office alleges that the elected Group I lacks a special technical feature and does not define a contribution over Bult et al.

The instant amendment addresses this issue by defining a contribution that is not found in Bult et al. Specifically, as amended, the claims are directed to a novel genus of sequences which have glucoamylase activity. Accordingly, after entry of the instant amendment, the claimed (amended) invention, elected Group I, and all pending claims including claims to non-elected groups II-XXII, will share a common “unity of invention” under PCT Rule 13.2.

Therefore, Applicants respectfully request that the requirement for restriction be withdrawn.

Search and Examination

Applicants thank the Examiner for performing a new search and examination on the correct version of SEQ ID NO:7 (encoding the polypeptide of SEQ ID NO:8).

Claim Objections

Claim 133, is objected as allegedly being dependent upon non-elected subject matter.

Applicants note that after the elected product claims (Group I, including claim 133) are found allowable, the withdrawn process claims (Groups II-XXII), that depend from or otherwise require all the limitations of an allowable product claim should be rejoined. MPEP § 821.04; In re Ochiai, 37 USPQ2d 1127 (Fed. Cir. 1995); In re Brouwer, 37 USPQ2d 1663 (Fed. Cir. 1995; 1184 OG 86, 3/26/96. Accordingly, Applicants respectfully request that this objection be held in

abeyance until after the product claim is found allowable, at which time this objection will be moot.

Issues under 35 U.S.C. §112, first paragraph - Enablement

Claims 1, 46, 56-58, 61, and 133, are rejected under 35 U.S.C. § 112, first paragraph enablement requirement for the reasons stated on pages 5-15, of the OA.

The instant amendment to the claims addresses this issue. For example, the scope of the claims has been amended so that the nucleic acids of claim 1 encode polypeptides having glucoamylase activity and no longer include nucleic acids encoding polypeptides having all of the catalytic activity features (several distinct activities) of claim 1(g). Claim 1(d) has been amended so that the nucleic acids encode polypeptide fragments of SEQ ID NO.: 8 having glucoamylase activity. Therefore, the fragments of claim 1(d) should no longer be interpreted as reading on any two/dipeptide sequences of SEQ ID NO:8, having all of the catalytic activity features (several distinct activities) of claim 1(g), but instead should be interpreted as fragments of SEQ ID NO:8 that are long enough to encode a polypeptide having glucoamylase activity. Accordingly, the claims as amended will enable a person of ordinary skill in the art to make and use the invention as described in the specification, without requiring undue experimentation.

Therefore, Applicants respectfully request the rejection under 35 U.S.C. § 112, first paragraph, enablement requirement be withdrawn.

Issues under 35 U.S.C. §112, first paragraph - written description

Claims 1, 46, 56-58, 61, and 133, are rejected under 35 U.S.C. § 112, first paragraph, for allegedly failing to comply with the written description requirement.

The instant amendment to the claims and the reasons stated above address this issue. Accordingly, a person of ordinary skill in the art would recognize from the disclosure that applicants were in possession of the invention as claimed.

Therefore, Applicants respectfully request the rejection under 35 U.S.C. § 112, first paragraph, written description requirement be withdrawn.

Issues under 35 U.S.C. §102(b)

Claims 1, 46, 56-58, and 61, are rejected in part under 35 U.S.C. § 102(b), as being allegedly anticipated by Bult et al., for the reasons stated on pages 22-27, of the OA.

The instant amendment to the claims and the reasons stated above address this issue. Furthermore, while Bult et al. teach short fragments that have 100% sequence identity to fragments of SEQ ID NO:8, the short fragments of Bult do not themselves have any apparent enzymatic activity. In contrast, the claims of the instant application, as amended, are directed to longer fragments of SEQ ID NO:8 having glucoamylase activity. Accordingly, Bult is not a single reference teaching each and every element of the claimed (amended) invention.

Therefore, Applicants respectfully request the rejection in part under 35 U.S.C. § 102(b), be withdrawn.

Issues under 35 U.S.C. § 103(a)

Bult et al., in view of the state of the art

Claims 1, 46, 56-58, 61, and 133 are rejected in part under 35 U.S.C. § 103(a), as allegedly being unpatentable over Bult et al., for the reasons stated on pages 25-27, of the OA.

The instant amendment to the claims and the reasons stated above address this issue. As discussed above, the instant amendment removes Bult as a single reference teaching each and every element of the claimed (amended) sequences. The state of the art at the time of the invention does not cure the defects in Bult to teach the claimed (amended) sequences.

Therefore, Applicants respectfully request the rejection in part under 35 U.S.C. § 103(a), over Bult et al., in view of the state of the art be withdrawn.

Bult et al., in view of Brown et al.

Claims 1, 46, 56-58, 61, and 133, are rejected in part under 35 U.S.C. § 103(a), as allegedly being unpatentable over Bult et al., in view of Brown et al., for the reasons stated on pages 27-30, of the OA.

The instant amendment to the claims and the reasons stated above address this issue.

Therefore, Applicants respectfully request the rejection in part under 35 U.S.C. § 103(a), over Bult et al., in view of Brown et al., be withdrawn.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants respectfully aver that the Examiner can properly withdraw the objections and the rejections of the pending claims under 35 U.S.C. § 112, first paragraph; 35 U.S.C. § 102(b); and 35 U.S.C. § 103(a). Applicants respectfully submit that after entry of the instant amendment all claims pending in this application will be in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. **50-0661** referencing docket no. **564462003900**. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

As noted above, Applicants have requested a telephone conference with the undersigned representative to expedite prosecution of this application. After the Examiner has reviewed the instant response and amendment, please telephone the undersigned at (858) 526-5450.

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Respectfully submitted,

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